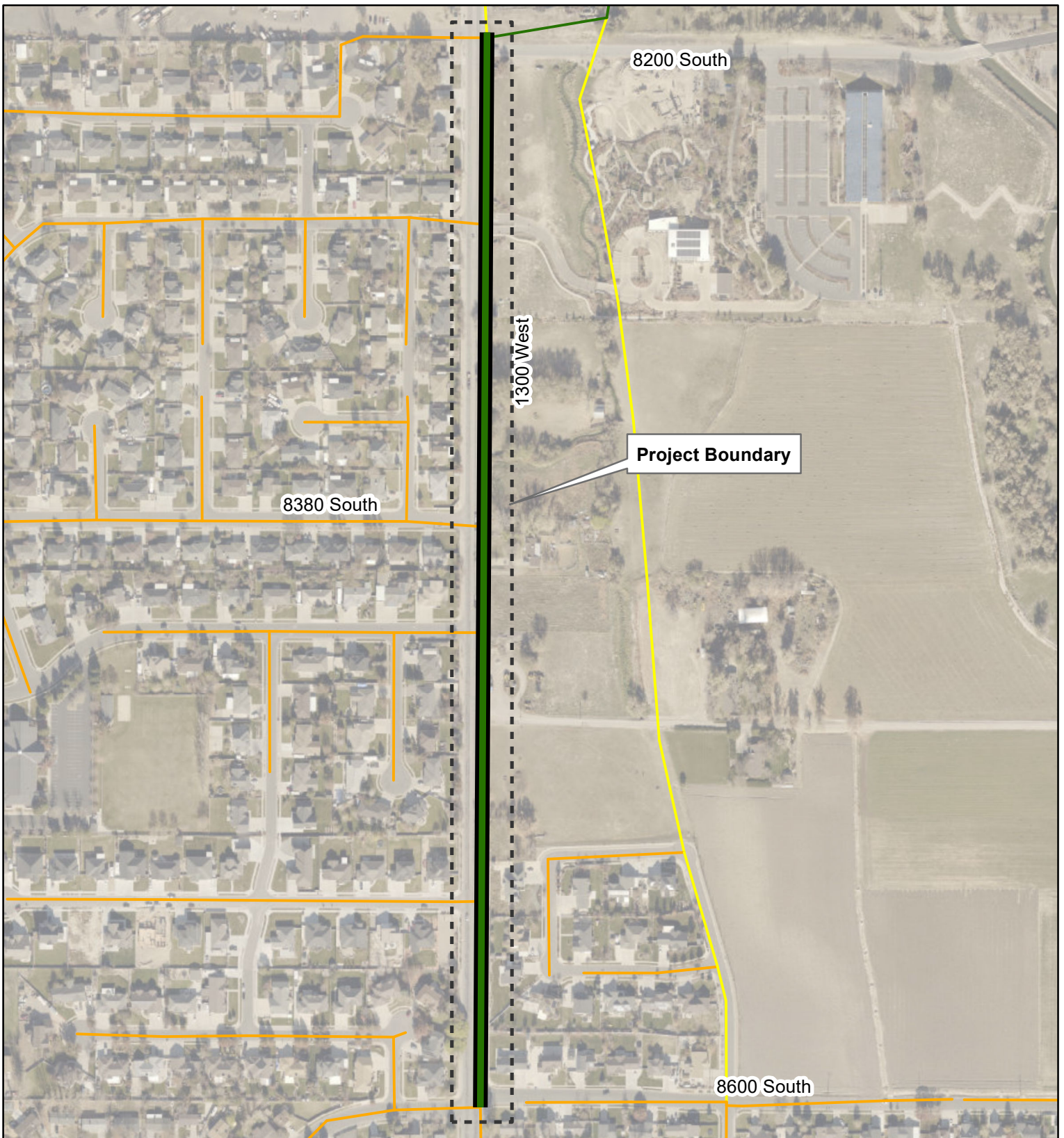


## **APPENDIX E**

### **Capital Improvement Plan Projects and Costs**

Master Plan Sewer Projects													
Major Trunkline Area	New Master Plan Priority	Old Master Plan ID	Old Master Plan Priority	Project Description	Location	Existing Facility	Future Pipe Size (in)	Pipe Length (LF)	Existing Peak Flow (cfs)	Future Peak Flow (cfs)	Budget Estimate	% Flow Existing Users	% Flow Future Users
8050 South	1		4b	1300 West	1300 West from 8600 South to 8200 South	10	15	2,470	1.15	1.15	\$1,191,000	100%	0%
9000 South	2			1300 West	1300 West from 9000 South to 9220 South	8	15	1,500	0.39	0.39	\$757,000	100%	0%
9000 South	3		22	9000 South	9000 South from Redwood Road to Jordan River Parkway	21	30	5,750	5.81	9.03	\$4,485,000	64%	36%
7800 South	4		New	7800 South	7800 South from between Mountain View Corridor and Highlands Loop Road to 5600 West	15	21	1,960	2.86	8.31	\$1,358,000	34%	66%
9000 South	5			9000 South	2700 West to Redwood Road	15	24	5,280	4.50	7.32	\$4,677,000	61%	39%
9000 South	6			9000 South	About 3500 West to 2700 West	12, 15	24	4,400	3.06	4.65	\$4,074,000	66%	34%
9000 South	7			9000 South	4000 West to 3695 West	12	24	2,110	2.47	4.02	\$2,536,000	61%	39%
9000 South	8			Old Bingham Highway	4800 West to 4000 West	10	18	6,020	1.34	3.00	\$4,474,000	45%	55%
9000 South	9			Hawley Park/9580 South	Wells Park to Bagley Park	8	18	2,680	0.50	1.52	\$2,362,000	33%	67%
9000 South	10		20, 21, 25	Wells Park Road	Prosperity to Hawley Park	8	15	4,290	0.35	1.35	\$3,674,000	26%	74%
9000 South	11		22	Jordan River Parkway	Jordan River Parkway from 9000 South to 8800 South	24	30	1,360	6.82	10.06	\$962,000	68%	32%
9000 South	12		New	Bagley Park Road	Bagley Park Drive from 5600 West to 9580 South	8	12	3,430	0.22	0.51	\$1,554,000	43%	57%
7800 South	13		Removed	Grizzly Way	Grizzly Way from Swift Water Way to 7800 South	12	15	1,280	2.52	2.74	\$713,000	92%	8%
7800 South	14		New	Grizzly Way	Grizzly Way from approx. Big Spring Drive to Swift Water Way	10	12	1,220			\$617,000		
7800 South	15		New	7800 South	7800 South from 1300 West to 1200 West	36	36	720	32.60	55.23	\$594,000	59%	41%
7000 South	16		23	7000 South	7000 South from Bangerter Highway to 3200 West	12, 15	24	2,380	1.71	3.82	\$1,515,000	45%	55%
7000 South	17		13	Campus View Drive, Cobble Ridge Drive, Jordan Landing Boulevard	Campus View Drive from Watkins Way to Cobble Ridge Drive Cobble Ridge Drive from Campus View Drive to Jordan Landing Boulevard Jordan Landing Boulevard from Cobble Ridge Drive to Jordan Village Road	8, 10	12	3,320	1.56	1.92	\$1,645,000	81%	19%
											<b>\$37,188,000</b>		
Operational Sewer Projects													
7800 South	1		7c	Sky View Estates Sbd, Remove pipe behind homes from 3200 W to the canal and reconnect pipe to 3200 W Meadow Green, 1000' pipe & repair 3-way manhole	3100 W 8250 S	10	8	1,000			\$142,000	100%	0%
9000 South	2		8b	Twin Oaks & Tamar Streets- relay pipe, poor slope	1350 W 8780 S	8	10	1,500	0.18	0.18	\$245,000	100%	0%
7800 South	3		9a	Jordan Landing Behind Wal-Mart - Line 5 Manholes	Jordan Landing/W. Bangerter Hwy	NA	NA	NA			\$37,000	100%	0%
9000 South	4		18	Dannon Way concrete pipe slip lining & 7 Manholes	Dannon Factory to Hawley Park Rd.	8	8	2,750			\$350,000	100%	0%
9000 South	5		15a	Mountain Meadow Upsize 500 LF pipe	8870 S 1095 W	8	10	500	0.17	0.17	\$69,000	100%	0%
7000 South	6		15b	2200 W Upsize 530 LF Pipe	2200 W 8100 S	8	10	530	0.1	0.1	\$73,000	100%	0%
9000 South	7		19a	Dannon Way, slip line pipe & 11 manholes	Hawley Park Rd to Axel Park Rd.	8	8	3,450			\$477,000	100%	0%
9000 South	8		19b	Sunleaf-10" pipe upsize	4300 W, 8780 S to 8660 S	8	10	603	0.22	0.22	\$146,000	100%	0%
9000 South	9			Bagley Industrial park pipeline upgrade 26,200' pipe to upgrade				26,200				100%	0%
	10			Sky View Estates easement exchange 600' of new sewer main and a better easement line with no manhole located in residential yard.				600				100%	0%
	11			Meadow Green Farms Easement line 1900' of new sewer main 800' of this will be with better easement line placement. This will eliminate 2,300' of easement line located in back yards.				1,900				100%	0%
	12			Troester/Bridal Acres Pipe upsize/upgrade project 3,400' pipe to upgrade				3,400				100%	0%
	13			Bateman farms 2 easement line elimination 170' of new sewer main and 4 private lateral reconnected to the new main.				170				100%	0%

	14		Jordan Oaks Estates to Pheasant Run Estates Easement line elimination 250' of new sewer main to redirect the sewer flows away from easement.				250				100%	0%
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**PROJECT 1:  
1300 West**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
	39		24
			27
			30
			36

0 170 340 Feet

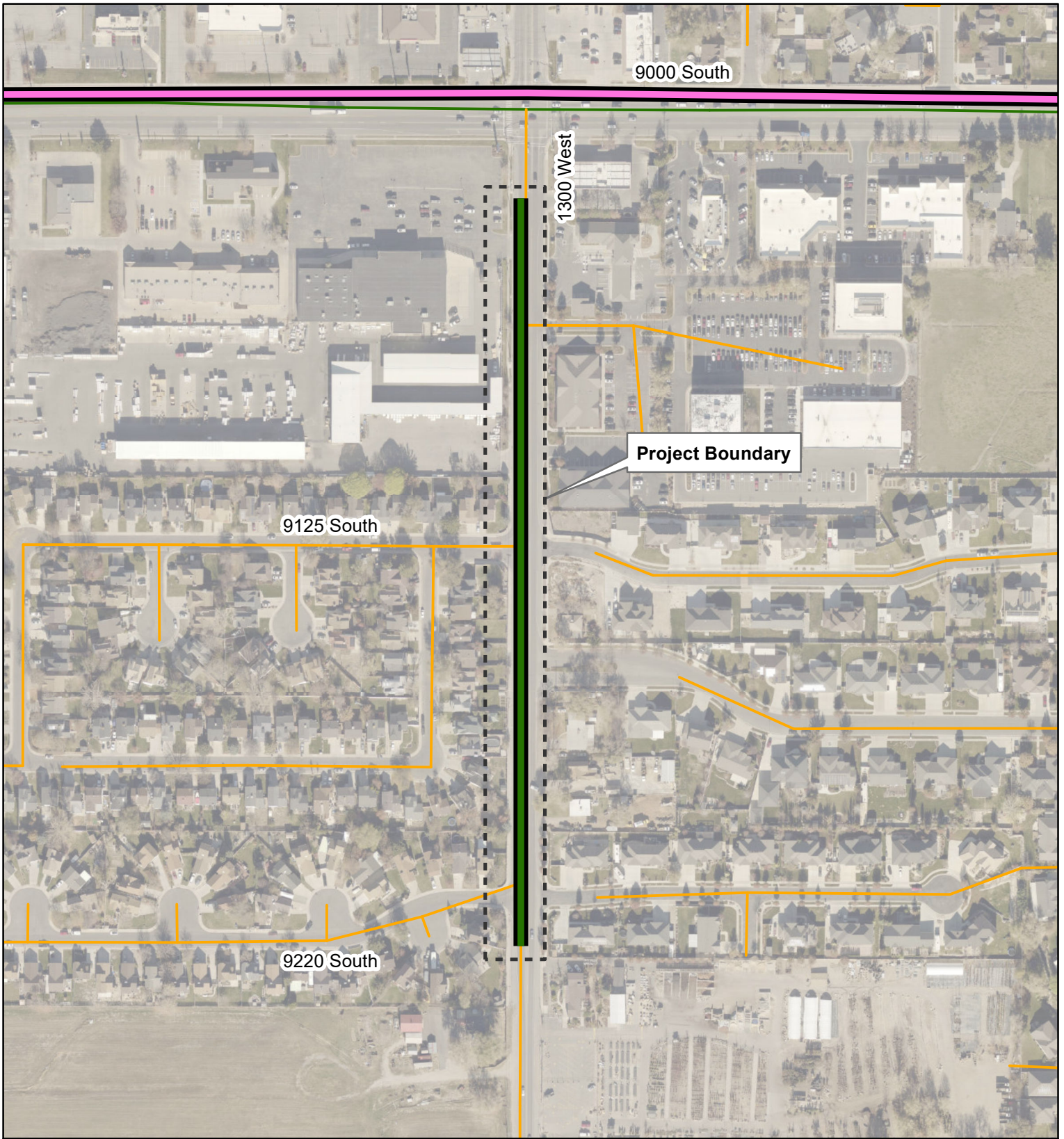
**J-U-B**  
J-U-B ENGINEERS, INC.

OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** 1300 West  
**Number:** 1  
**Desc:** 1300 West from 8600 South to 8200 South

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 66,140	\$ 66,140
2	Traffic Control (approx 10%)	LS	1	\$ 66,140	\$ 66,140
<b>SUBTOTAL</b>					<b>\$ 132,280</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF	2,470	\$ 40	\$ 98,800
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	2,470	\$ 10	\$ 24,700
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 135,500</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	2,470	\$ 100	\$ 247,000
<b>SUBTOTAL</b>					<b>\$ 247,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	2,470	\$ 80	\$ 197,600
<b>SUBTOTAL</b>					<b>\$ 197,600</b>
<b>Manholes</b>					
17	60" Manhole (10-20 ft. depth)	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 42,000</b>
<b>Crossings/Borings</b>					
18	Irrigation Canal or Railroad (Boring)	EA		\$ 150,000	\$ -
19	Major Arterial Crossing (Boring)	EA		\$ 250,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
20	Lateral Connections (estimate)	EA	3	\$ 1,100	\$ 3,300
21	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 39,300</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 793,680</b>
	Construction Contingency		25%	\$	198,420
	Engineering, Administration, Legal, etc.		20%	\$	158,736
	City Staff Time		5.0%	\$	39,684
<b>TOTAL COSTS</b>					<b>\$ 1,191,000</b>



9000 South

1300 West

Project Boundary

9125 South

9220 South



**PROJECT 2:  
1300 West**

**Future  
Pipe  
Size**

- 12
- 15

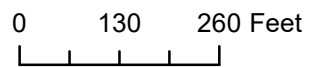
- 18
- 21
- 24

- 30
- 36

**Existing  
Pipe  
Size**

- 6
- 8

- 10
- 12
- 15
- 18
- 21
- 24
- 27
- 30
- 36
- 39



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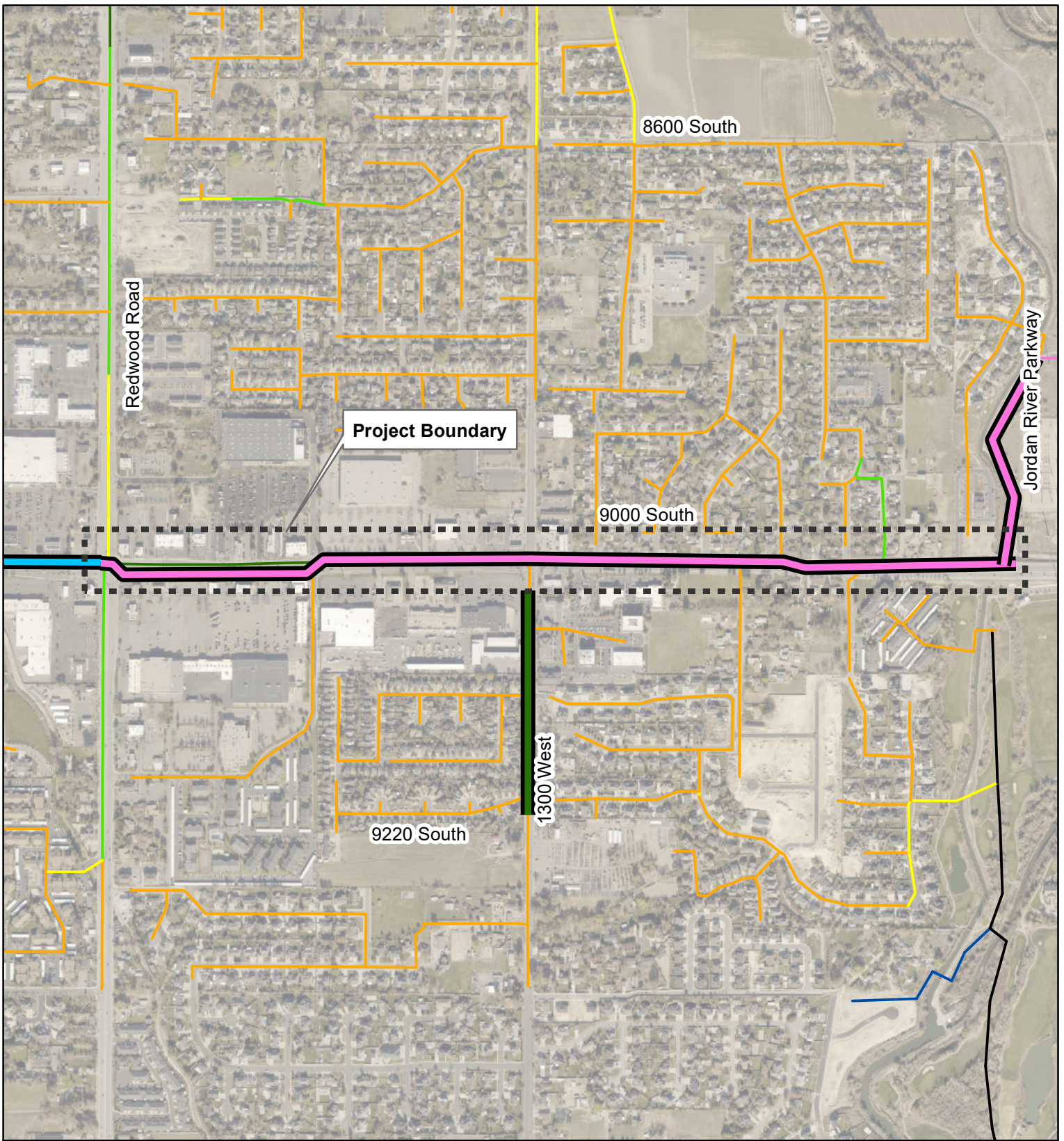
GATEWAY MAPPING INC.  
A J-U-B Company

OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** 1300 West  
**Number:** 2  
**Desc:** 1300 West from 9000 South to 9220 South

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 42,030	\$ 42,030
2	Traffic Control (approx 10%)	LS	1	\$ 42,030	\$ 42,030
<b>SUBTOTAL</b>					<b>\$ 84,060</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF	1,500	\$ 40	\$ 60,000
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	1,500	\$ 10	\$ 15,000
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 87,000</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	1,500	\$ 100	\$ 150,000
<b>SUBTOTAL</b>					<b>\$ 150,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	1,500	\$ 80	\$ 120,000
<b>SUBTOTAL</b>					<b>\$ 120,000</b>
<b>Manholes</b>					
17	60" Manhole (10-20 ft. depth)	EA	4	\$ 6,000	\$ 24,000
<b>SUBTOTAL</b>					<b>\$ 24,000</b>
<b>Crossings/Borings</b>					
18	Irrigation Canal or Railroad (Boring)	EA		\$ 150,000	\$ -
19	Major Arterial Crossing (Boring)	EA		\$ 250,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
20	Lateral Connections (estimate)	EA	3	\$ 1,100	\$ 3,300
21	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 39,300</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 504,360</b>
	Construction Contingency		25%	\$	\$ 126,090
	Engineering, Administration, Legal, etc.		20%	\$	\$ 100,872
	City Staff Time		5.0%	\$	\$ 25,218
<b>TOTAL COSTS</b>					<b>\$ 757,000</b>



**PROJECT 3:  
9000 South**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	27		18
	30		21
	36		24
	39		27

0 425 850 Feet

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J-U-B ENGINEERS, INC.

OTHER J-U-B COMPANIES



## OPINION OF PROBABLE COST

**Name:** 9000 South  
**Number:** 3  
**Desc:** 9000 South from Redwood Road to Jordan River Parkway

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 249,150	\$ 249,150
2	Traffic Control (approx 10%)	LS	1	\$ 249,150	\$ 249,150
<b>SUBTOTAL</b>					<b>\$ 498,300</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF	5,750	\$ 115	\$ 661,250
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	5,750	\$ 25	\$ 143,750
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 817,000</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	5,750	\$ 120	\$ 690,000
<b>SUBTOTAL</b>					<b>\$ 690,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	5,750	\$ 130	\$ 747,500
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 747,500</b>
<b>Manholes</b>					
17	60" Manhole (10-20 ft. depth)	EA	15	\$ 6,000	\$ 90,000
<b>SUBTOTAL</b>					<b>\$ 90,000</b>
<b>Crossings/Borings</b>					
18	Irrigation Canal or Railroad (Boring)	EA	1	\$ 75,000	\$ 75,000
19	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 75,000</b>
<b>Miscellaneous</b>					
20	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
21	Bypass Pumping	Days	60	\$ 1,200	\$ 72,000
<b>SUBTOTAL</b>					<b>\$ 72,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 2,989,800</b>
			Construction Contingency	25%	\$ 747,450
			Engineering, Administration, Legal, etc.	20%	\$ 597,960
			City Staff Time	5.0%	\$ 149,490
<b>TOTAL COSTS</b>					<b>\$ 4,485,000</b>



**PROJECT 4:  
7800 South**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
	39		24
			27
			30
			36
			39

0 170 340 Feet

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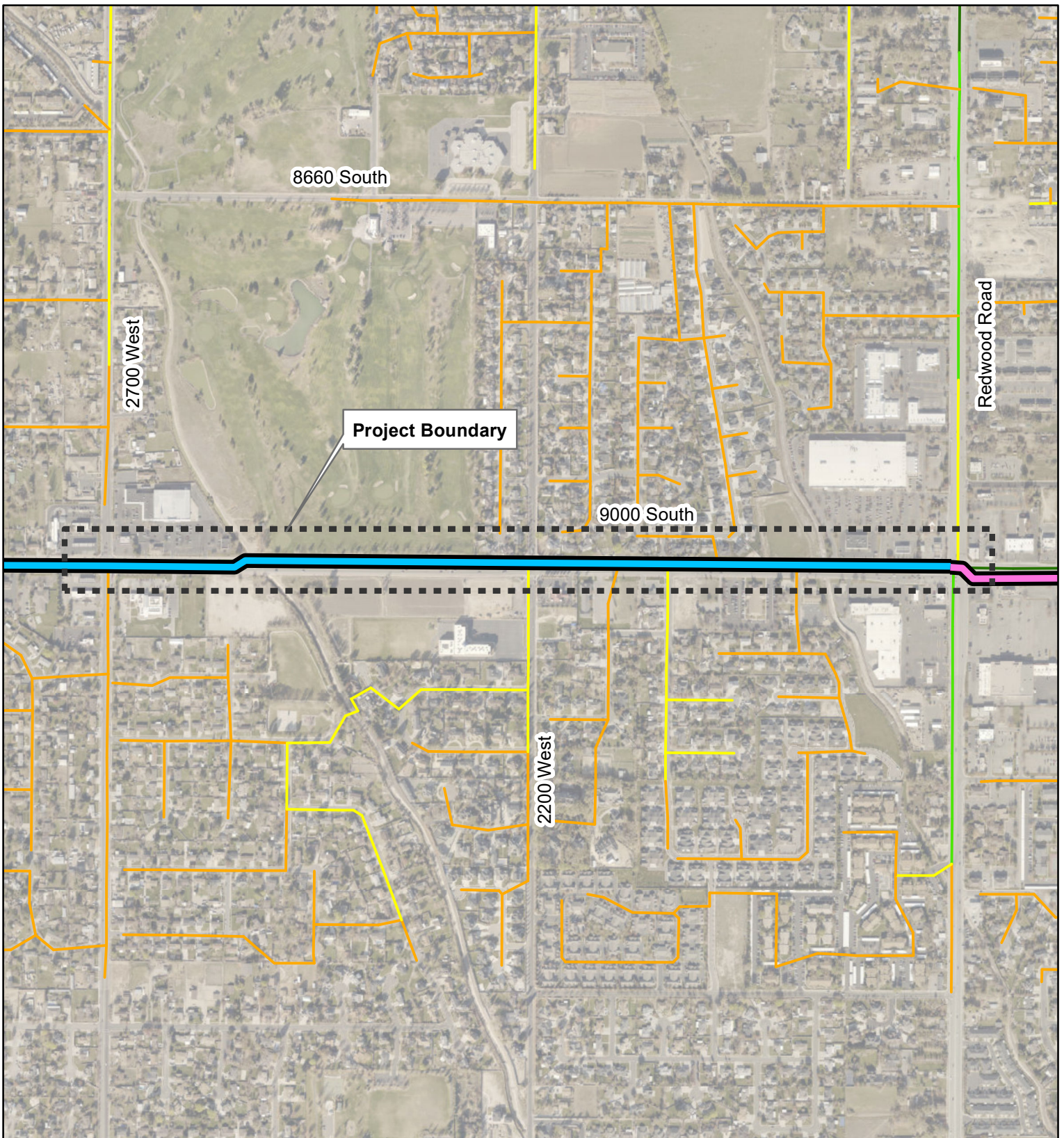
THE LANGDON GROUP  
 GATEWAY MAPPING INC.

OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

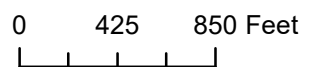
**Name:** 7800 South  
**Number:** 4  
**Desc:** 7800 South from between Mountain View Corridor and Highlands Loop Road to

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 75,420	\$ 75,420
2	Traffic Control (approx 10%)	LS	1	\$ 75,420	\$ 75,420
<b>SUBTOTAL</b>					<b>\$ 150,840</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF	1,960	\$ 70	\$ 137,200
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	1,960	\$ 25	\$ 49,000
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 198,200</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	1,960	\$ 120	\$ 235,200
<b>SUBTOTAL</b>					<b>\$ 235,200</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	1,960	\$ 130	\$ 254,800
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 254,800</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	5	\$ 6,000	\$ 30,000
<b>SUBTOTAL</b>					<b>\$ 30,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 905,040</b>
	Construction Contingency		25%	\$	226,260
	Engineering, Administration, Legal, etc.		20%	\$	181,008
	City Staff Time		5.0%	\$	45,252
<b>TOTAL COSTS</b>					<b>\$ 1,358,000</b>



**PROJECT 5:  
9000 South**

Future Pipe Size		Existing Pipe Size	
	12		10
	15		12
	18		15
	21		18
	24		21
	30		24
	36		27
	8		30
			36
			39



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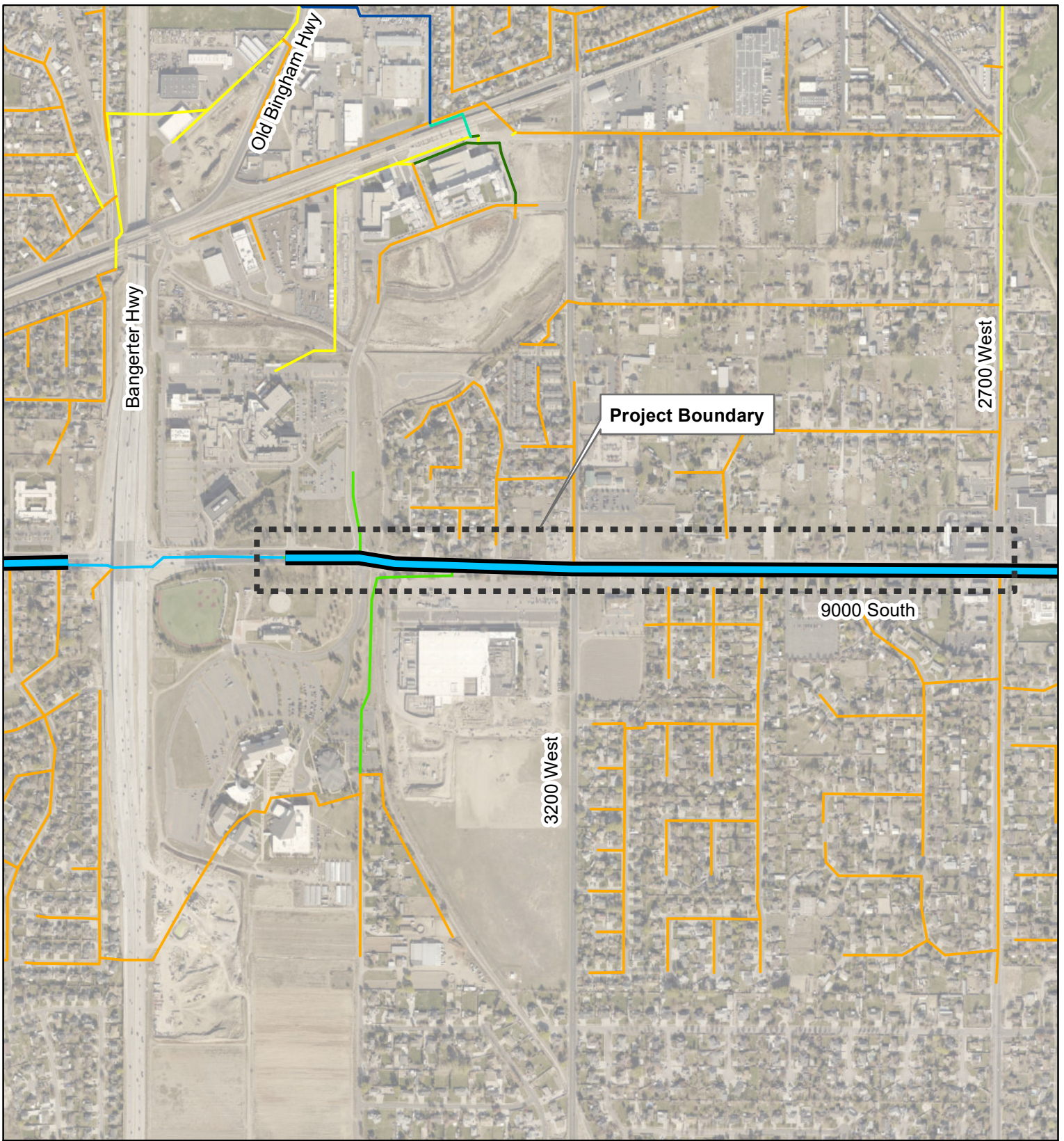
GATEWAY MAPPING INC.  
A J-U-B Company

OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** 9000 South  
**Number:** 5  
**Desc:** 2700 West to Redwood Road

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 259,830	\$ 259,830
2	Traffic Control (approx 10%)	LS	1	\$ 259,830	\$ 259,830
<b>SUBTOTAL</b>					<b>\$ 519,660</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF	5,280	\$ 85	\$ 448,800
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	5,280	\$ 25	\$ 132,000
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 622,800</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	5,280	\$ 120	\$ 633,600
<b>SUBTOTAL</b>					<b>\$ 633,600</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	5,280	\$ 130	\$ 686,400
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 686,400</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	14	\$ 6,000	\$ 84,000
<b>SUBTOTAL</b>					<b>\$ 84,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 75,000	\$ 375,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 375,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 3,117,960</b>
	Construction Contingency		25%	\$	779,490
	Engineering, Administration, Legal, etc.		20%	\$	623,592
	City Staff Time		5.0%	\$	155,898
<b>TOTAL COSTS</b>					<b>\$ 4,677,000</b>



Project Boundary

Bangerter Hwy

Old Bingham Hwy

2700 West

9000 South

3200 West



**PROJECT 6:  
9000 South**

**Future  
Pipe  
Size**

- 12
- 15

**Existing  
Pipe  
Size**

- 30
- 36

**Existing  
Pipe  
Size**

- 6
- 8

**Existing  
Pipe  
Size**

- 10
- 12
- 15
- 18
- 21
- 27
- 30
- 36
- 39

0 425 850 Feet



J-U-B ENGINEERS, INC.



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A J-U-B Company



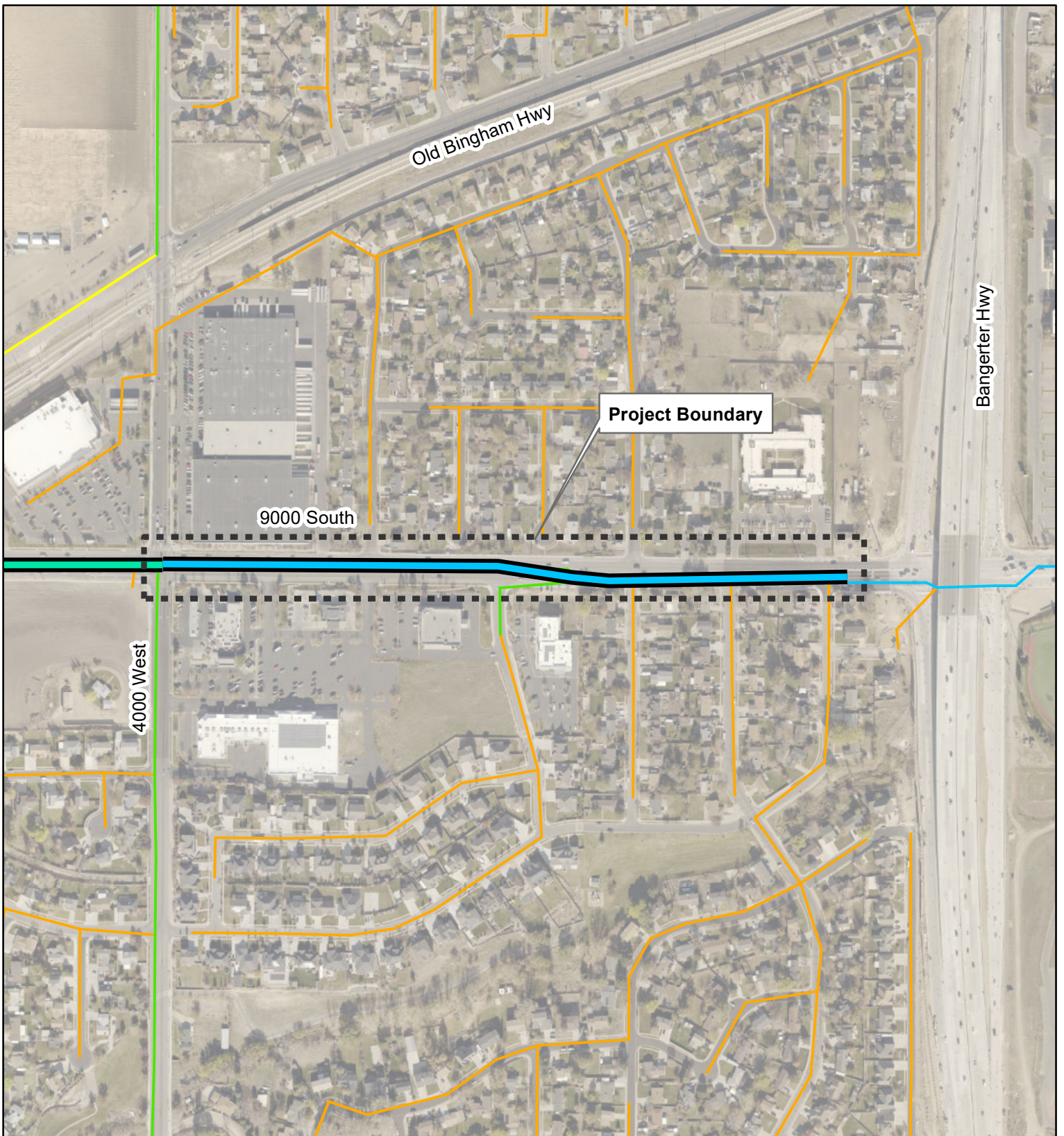
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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** 9000 South  
**Number:** 6  
**Desc:** About 3500 West to 2700 West

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 226,350	\$ 226,350
2	Traffic Control (approx 10%)	LS	1	\$ 226,350	\$ 226,350
<b>SUBTOTAL</b>					<b>\$ 452,700</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF	4,400	\$ 85	\$ 374,000
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	4,400	\$ 25	\$ 110,000
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 526,000</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	4,400	\$ 120	\$ 528,000
<b>SUBTOTAL</b>					<b>\$ 528,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	4,400	\$ 130	\$ 572,000
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 572,000</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	11	\$ 6,000	\$ 66,000
<b>SUBTOTAL</b>					<b>\$ 66,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 75,000	\$ 375,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 375,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 2,716,200</b>
			25%	\$	679,050
			20%	\$	543,240
			5.0%	\$	135,810
<b>TOTAL COSTS</b>					<b>\$ 4,074,000</b>



**PROJECT 7:  
9000 South**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	27		18
	30		21
	36		24
	39		27
			30
			36

0 210 420 Feet

**J-U-B ENGINEERS, INC.**

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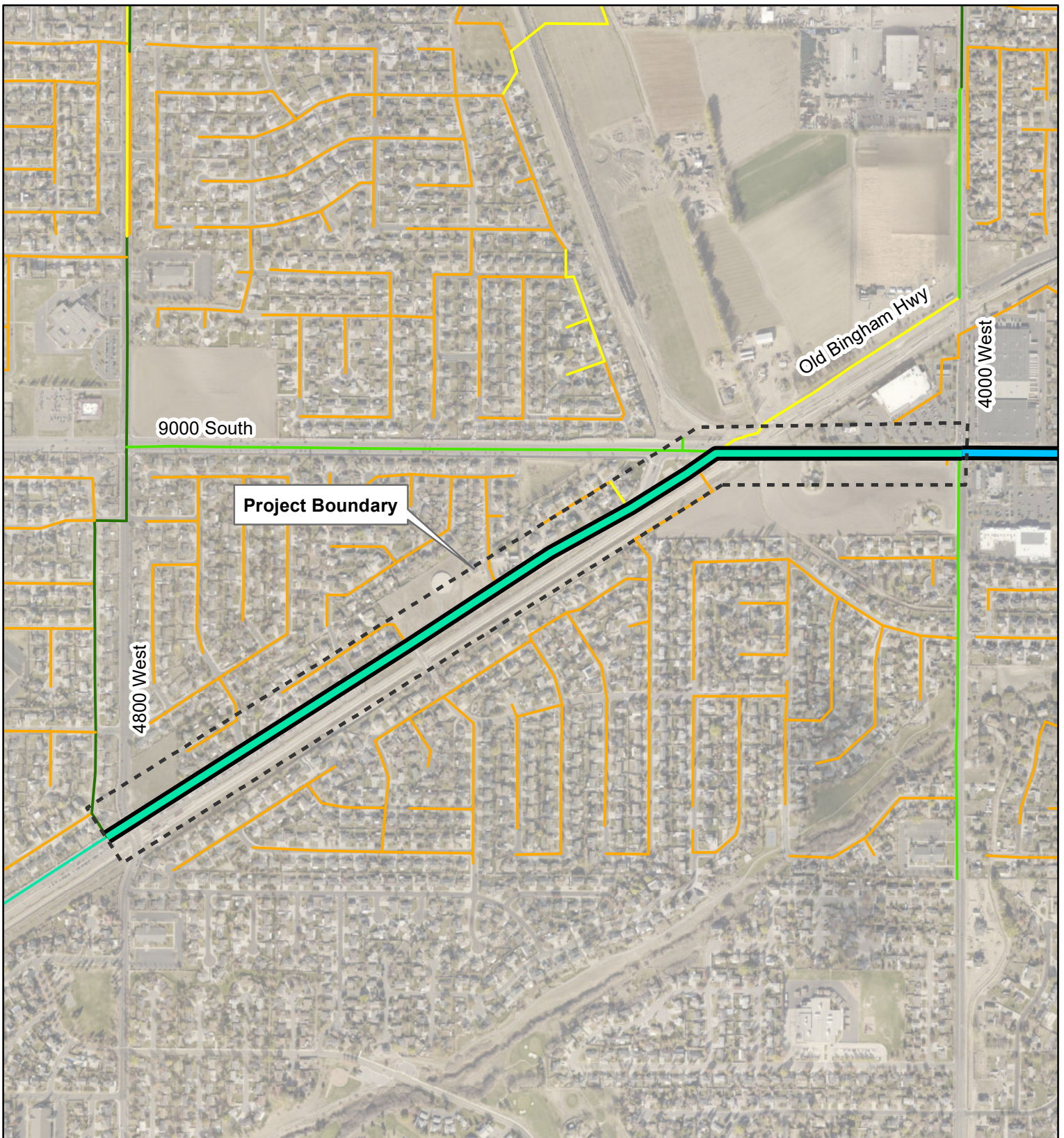
OTHER J-U-B COMPANIES



## OPINION OF PROBABLE COST

**Name:** 9000 South  
**Number:** 7  
**Desc:** 4000 West to 3695 West

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 140,910	\$ 140,910
2	Traffic Control (approx 10%)	LS	1	\$ 140,910	\$ 140,910
<b>SUBTOTAL</b>					<b>\$ 281,820</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF	2,110	\$ 85	\$ 179,350
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	2,110	\$ 25	\$ 52,750
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 274,100</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	2,110	\$ 120	\$ 253,200
<b>SUBTOTAL</b>					<b>\$ 253,200</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	2,110	\$ 130	\$ 274,300
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 274,300</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	6	\$ 6,000	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 75,000	\$ 375,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 375,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 1,690,920</b>
			25%	\$	422,730
			20%	\$	338,184
			5.0%	\$	84,546
<b>TOTAL COSTS</b>					<b>\$ 2,536,000</b>



**PROJECT 8:  
Old Bingham Hwy**

Future Pipe Size		Existing Pipe Size	
	18		10
	21		12
	24		15
	12		30
	15		6
	12		18
	15		36
	15		8
	15		21
	15		27
	15		30
	15		36
	15		39

0 425 850 Feet

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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** Old Bingham Highway  
**Number:** 8  
**Desc:** 4800 West to 4000 West

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 248,540	\$ 248,540
2	Traffic Control (approx 10%)	LS	1	\$ 248,540	\$ 248,540
<b>SUBTOTAL</b>					<b>\$ 497,080</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF	6,020	\$ 55	\$ 331,100
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	6,020	\$ 10	\$ 60,200
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 433,300</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	6,020	\$ 100	\$ 602,000
<b>SUBTOTAL</b>					<b>\$ 602,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF	6,020	\$ 130	\$ 782,600
16	City Asphalt Patch (20 ft wide)	LF		\$ 80	\$ -
<b>SUBTOTAL</b>					<b>\$ 782,600</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	16	\$ 6,000	\$ 96,000
<b>SUBTOTAL</b>					<b>\$ 96,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 75,000	\$ 375,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 375,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 2,982,480</b>
	Construction Contingency		25%	\$	745,620
	Engineering, Administration, Legal, etc.		20%	\$	596,496
	City Staff Time		5.0%	\$	149,124
<b>TOTAL COSTS</b>					<b>\$ 4,474,000</b>



**PROJECT 9:  
Hawley Park Rd**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
	39		24
			27
			30
			36

0 210 420 Feet

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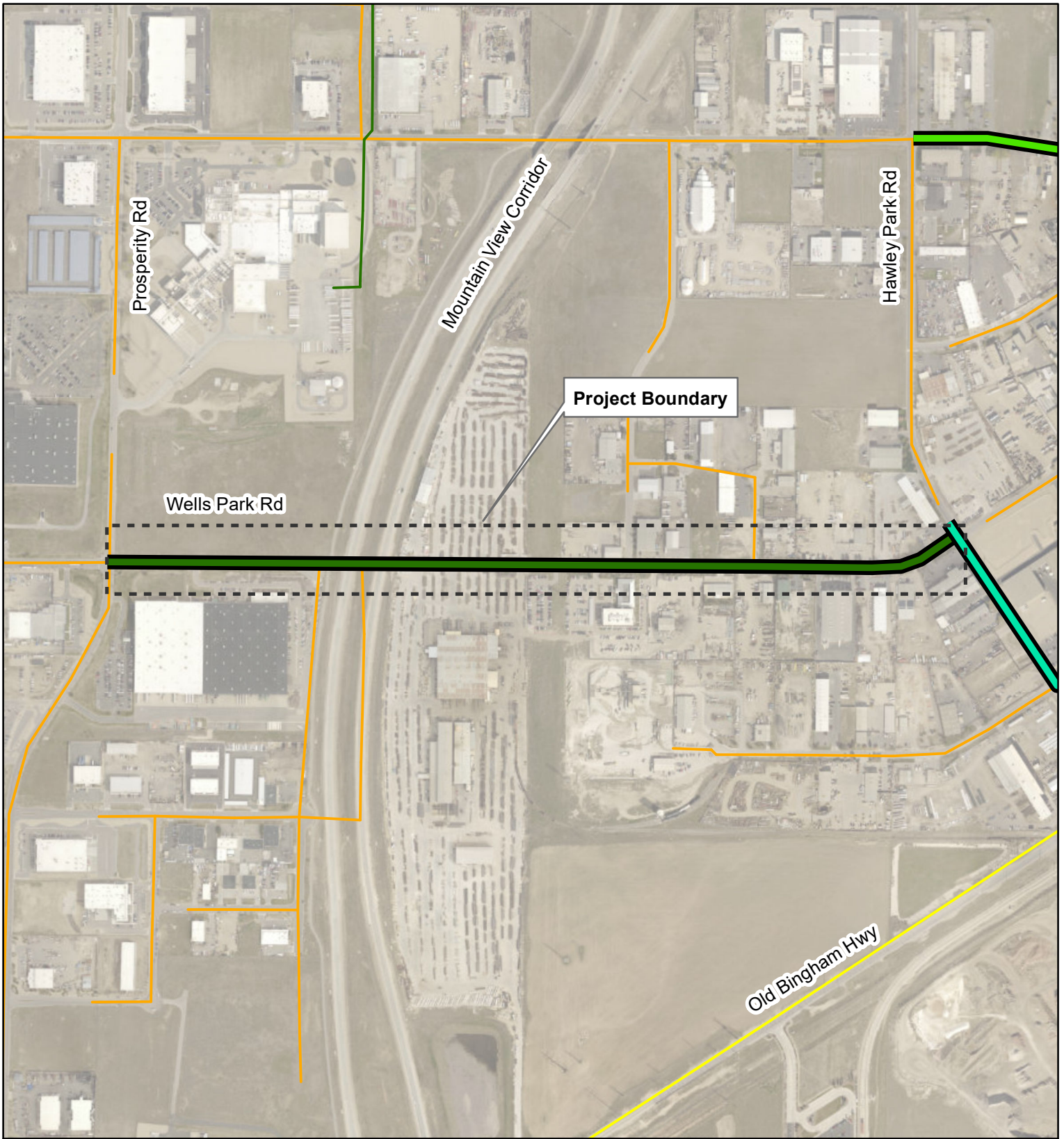
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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** Hawley Park/9580 South  
**Number:** 9  
**Desc:** Wells Park to Bagley Park

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 131,210	\$ 131,210
2	Traffic Control (approx 10%)	LS	1	\$ 131,210	\$ 131,210
<b>SUBTOTAL</b>					<b>\$ 262,420</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF	2,680	\$ 55	\$ 147,400
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	2,680	\$ 10	\$ 26,800
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 216,200</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	2,680	\$ 100	\$ 268,000
<b>SUBTOTAL</b>					<b>\$ 268,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	2,680	\$ 80	\$ 214,400
<b>SUBTOTAL</b>					<b>\$ 214,400</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 42,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 75,000	\$ 375,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 375,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 1,574,520</b>
	Construction Contingency		25%	\$	393,630
	Engineering, Administration, Legal, etc.		20%	\$	314,904
	City Staff Time		5.0%	\$	78,726
<b>TOTAL COSTS</b>					<b>\$ 2,362,000</b>



**PROJECT 10:  
Wells Park Rd**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
			27
			30
			36
			39

0 350 700 Feet

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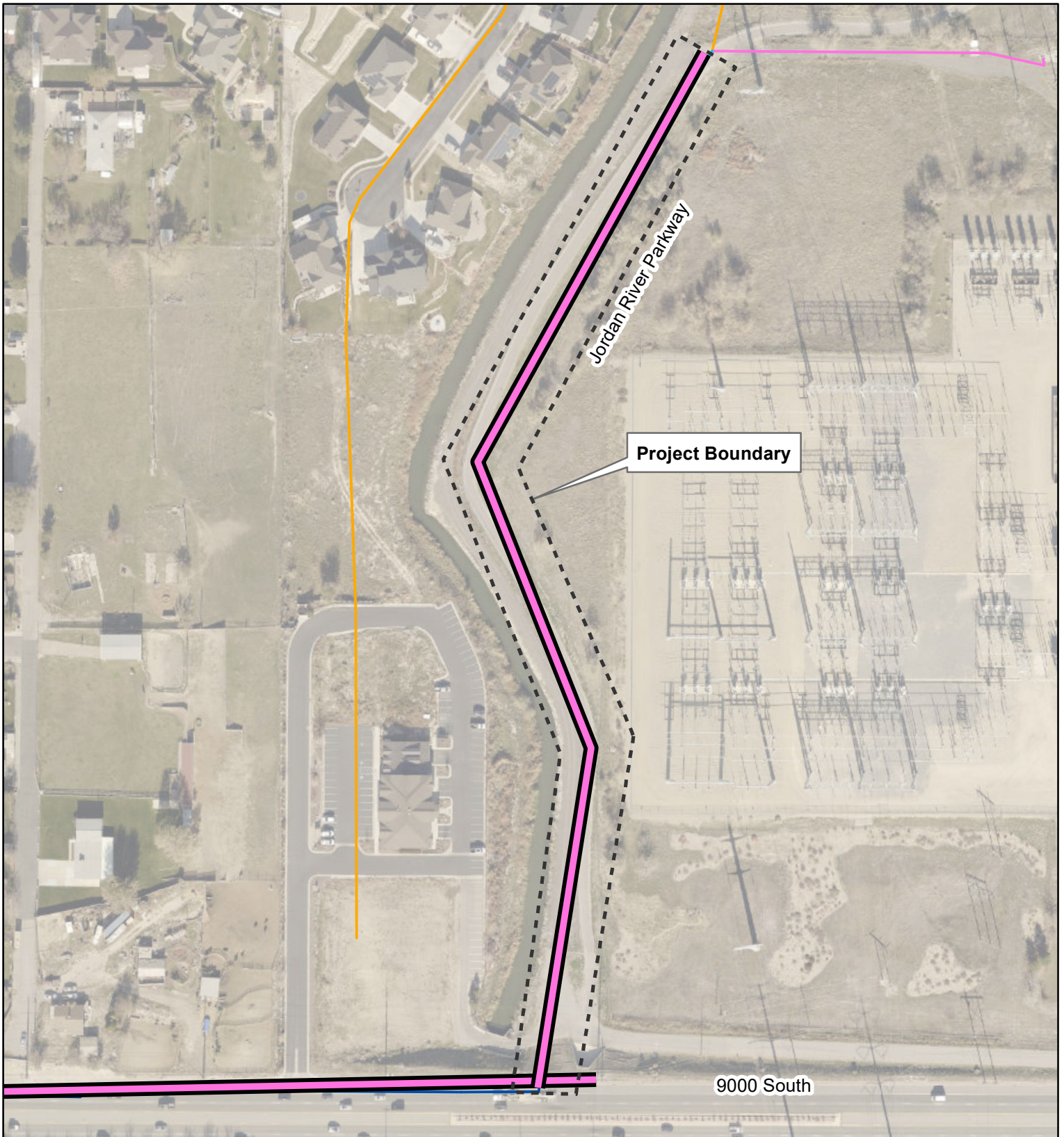
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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

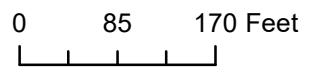
**Name:** Wells Park Road  
**Number:** 10  
**Desc:** Prosperity to Hawley Park

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 204,120	\$ 204,120
2	Traffic Control (approx 10%)	LS	1	\$ 204,120	\$ 204,120
<b>SUBTOTAL</b>					<b>\$ 408,240</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF	4,290	\$ 40	\$ 171,600
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	4,290	\$ 10	\$ 42,900
13	Connect to Existing	EA	7	\$ 6,000	\$ 42,000
<b>SUBTOTAL</b>					<b>\$ 256,500</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	4,290	\$ 100	\$ 429,000
<b>SUBTOTAL</b>					<b>\$ 429,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	4,290	\$ 80	\$ 343,200
<b>SUBTOTAL</b>					<b>\$ 343,200</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	11	\$ 6,000	\$ 66,000
<b>SUBTOTAL</b>					<b>\$ 66,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	5	\$ 150,000	\$ 750,000
18	Major Arterial Crossing (Boring)	EA		\$ 250,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 750,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	15	\$ 1,100	\$ 16,500
20	Bypass Pumping	Days	150	\$ 1,200	\$ 180,000
<b>SUBTOTAL</b>					<b>\$ 196,500</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 2,449,440</b>
	Construction Contingency		25%	\$	612,360
	Engineering, Administration, Legal, etc.		20%	\$	489,888
	City Staff Time		5.0%	\$	122,472
<b>TOTAL COSTS</b>					<b>\$ 3,674,000</b>



**PROJECT 11:  
Jordan River Pkwy**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
			24
			27
			30
			36
			39



J-U-B ENGINEERS, INC.



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J-U-B Company



GATEWAY MAPPING INC.  
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OTHER J-U-B COMPANIES



## OPINION OF PROBABLE COST

**Name:** Jordan River Parkway  
**Number:** 11  
**Desc:** Jordan River Parkway from 9000 South to 8800 South

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 53,440	\$ 53,440
2	Traffic Control (approx 10%)	LS	1	\$ 53,440	\$ 53,440
<b>SUBTOTAL</b>					<b>\$ 106,880</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF	1,360	\$ 115	\$ 156,400
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	1,360	\$ 25	\$ 34,000
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 202,400</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	1,360	\$ 120	\$ 163,200
<b>SUBTOTAL</b>					<b>\$ 163,200</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	1,360	\$ 80	\$ 108,800
<b>SUBTOTAL</b>					<b>\$ 108,800</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	4	\$ 6,000	\$ 24,000
<b>SUBTOTAL</b>					<b>\$ 24,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 641,280</b>
	Construction Contingency		25%	\$	160,320
	Engineering, Administration, Legal, etc.		20%	\$	128,256
	City Staff Time		5.0%	\$	32,064
<b>TOTAL COSTS</b>					<b>\$ 962,000</b>



**PROJECT 12:  
Bagley Park Rd**

Future Pipe Size		Existing Pipe Size	
	12		10
	15		12
	18		15
	21		18
	24		21
	30		6
	36		8
	39		24
			27
			30
			36
			39

0 170 340 Feet

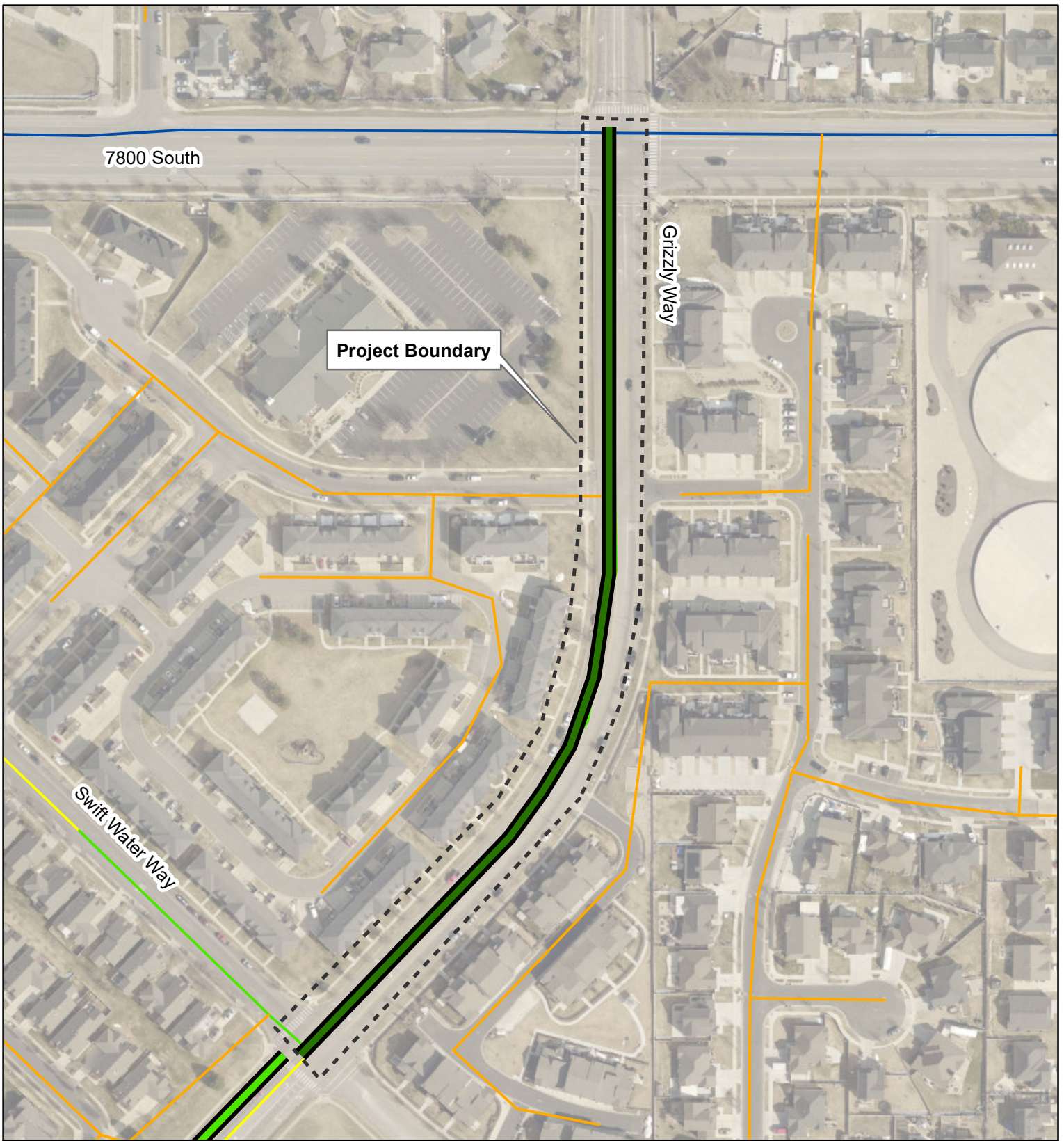
**J-U-B**  
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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** Bagley Park Road  
**Number:** 12  
**Desc:** Bagley Park Drive from 5600 West to 9580 South

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 86,346	\$ 86,346
2	Traffic Control (approx 10%)	LS	1	\$ 86,346	\$ 86,346
<b>SUBTOTAL</b>					<b>\$ 172,692</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF	3,430	\$ 32	\$ 109,760
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	3,430	\$ 10	\$ 34,300
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 156,060</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	3,430	\$ 100	\$ 343,000
<b>SUBTOTAL</b>					<b>\$ 343,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	3,430	\$ 80	\$ 274,400
<b>SUBTOTAL</b>					<b>\$ 274,400</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	9	\$ 6,000	\$ 54,000
<b>SUBTOTAL</b>					<b>\$ 54,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 1,036,152</b>
			25%	\$	259,038
			20%	\$	207,230
			5.0%	\$	51,808
<b>TOTAL COSTS</b>					<b>\$ 1,554,000</b>



**PROJECT 13:  
Grizzly Way**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		27
	30		36
	36		39

0 85 170 Feet

**J-U-B**  
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OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** Grizzly Way  
**Number:** 13  
**Desc:** Grizzly Way from Swift Water Way to 7800 South

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 39,610	\$ 39,610
2	Traffic Control (approx 10%)	LS	1	\$ 39,610	\$ 39,610
<b>SUBTOTAL</b>					<b>\$ 79,220</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF	1,280	\$ 40	\$ 51,200
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	1,280	\$ 10	\$ 12,800
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 76,000</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	1,280	\$ 100	\$ 128,000
<b>SUBTOTAL</b>					<b>\$ 128,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	1,280	\$ 80	\$ 102,400
<b>SUBTOTAL</b>					<b>\$ 102,400</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	4	\$ 6,000	\$ 24,000
<b>SUBTOTAL</b>					<b>\$ 24,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	27	\$ 1,100	\$ 29,700
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 65,700</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 475,320</b>
	Construction Contingency		25%	\$	118,830
	Engineering, Administration, Legal, etc.		20%	\$	95,064
	City Staff Time		5.0%	\$	23,766
<b>TOTAL COSTS</b>					<b>\$ 713,000</b>



**PROJECT 14:**  
**Grizzly Way**

Future Pipe Size		Existing Pipe Size	
	12		10
	15		24
	18		27
	21		30
	24		36
	30		6
	36		8
			21
			39

0 85 170 Feet

**J-U-B**  
J-U-B ENGINEERS, INC.

THE LANGDON GROUP  
 GATEWAY MAPPING INC.

OTHER J-U-B COMPANIES

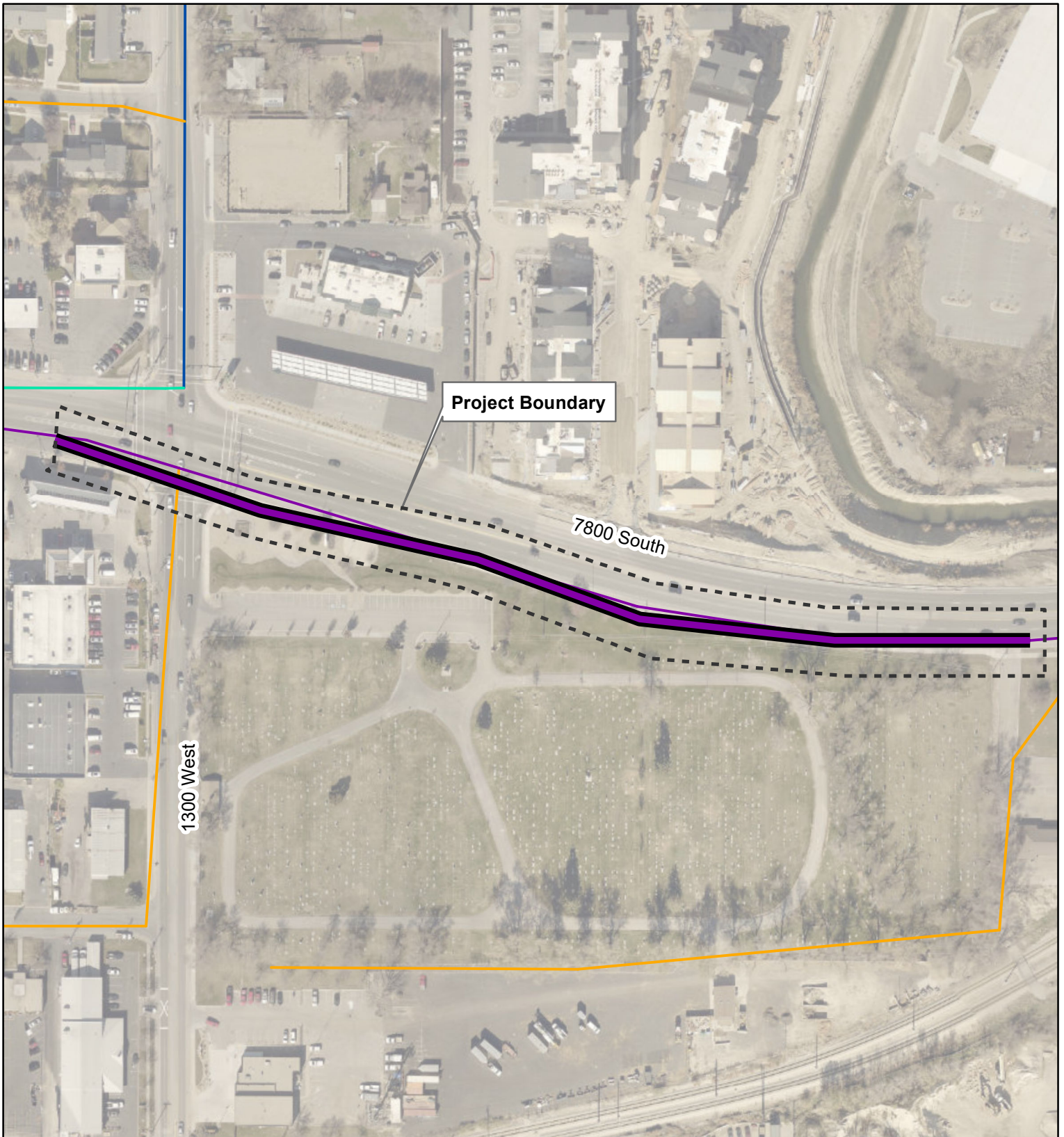
## OPINION OF PROBABLE COST

**Name:** Grizzly Way

**Number:** 14

**Desc:** Grizzly Way from approx. Big Spring Drive to Swift Water Way

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 34,284	\$ 34,284
2	Traffic Control (approx 10%)	LS	1	\$ 34,284	\$ 34,284
<b>SUBTOTAL</b>					<b>\$ 68,568</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF	1,220	\$ 32	\$ 39,040
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	1,220	\$ 10	\$ 12,200
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 63,240</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	1,220	\$ 100	\$ 122,000
<b>SUBTOTAL</b>					<b>\$ 122,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	1,220	\$ 80	\$ 97,600
<b>SUBTOTAL</b>					<b>\$ 97,600</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	4	\$ 6,000	\$ 24,000
<b>SUBTOTAL</b>					<b>\$ 24,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 411,408</b>
			Construction Contingency	25%	\$ 102,852
			Engineering, Administration, Legal, etc.	20%	\$ 82,282
			City Staff Time	5.0%	\$ 20,570
<b>TOTAL COSTS</b>					<b>\$ 617,000</b>



Project Boundary

7800 South

1300 West



**PROJECT 15:  
7800 South**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		15
	30		18
	36		21
			27
			30
			36
			39

0 85 170 Feet

**J-U-B**  
J-U-B ENGINEERS, INC.

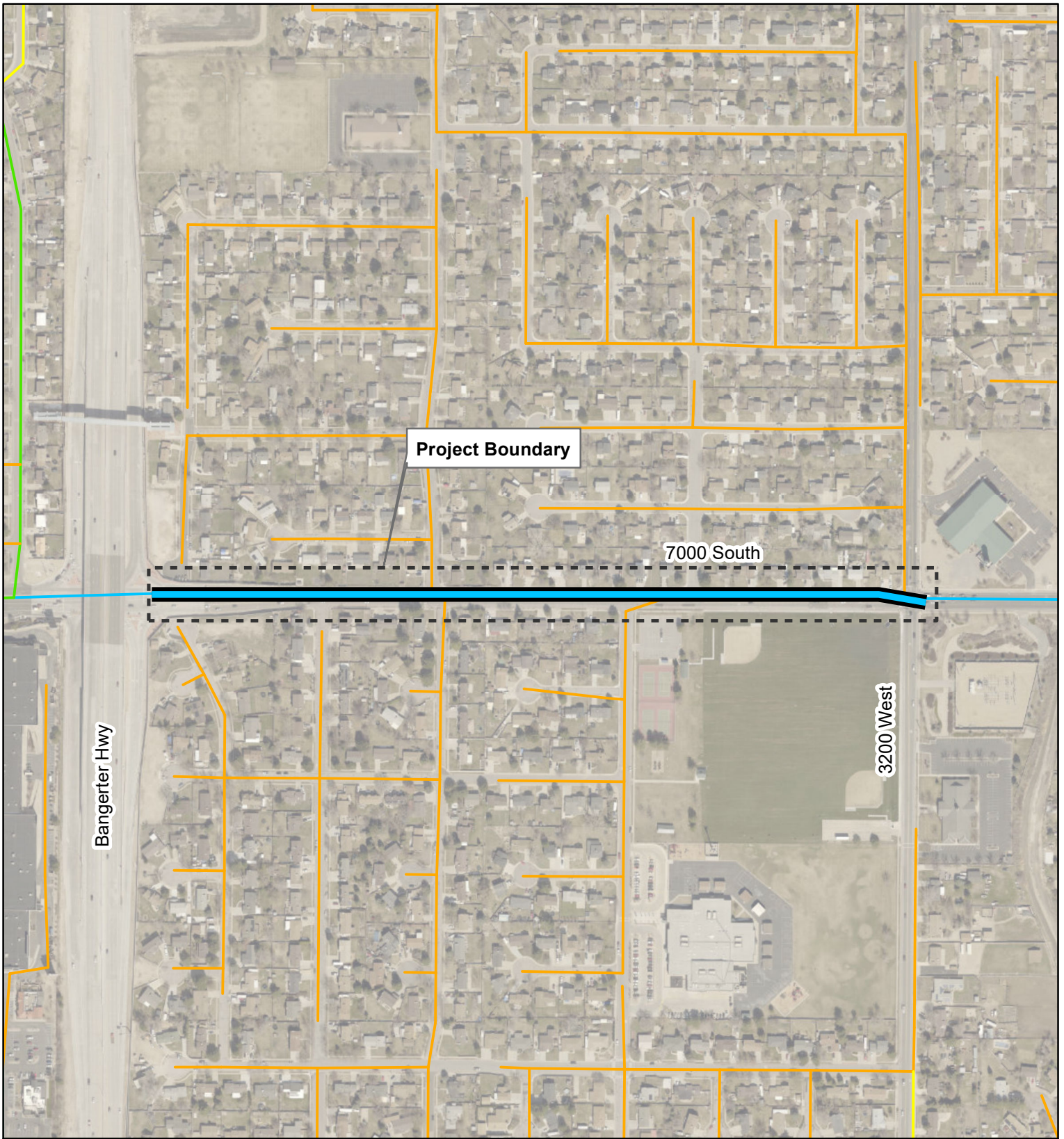
OTHER J-U-B COMPANIES



## OPINION OF PROBABLE COST

**Name:** 7800 South  
**Number:** 15  
**Desc:** 7800 South from 1300 West to 1200 West

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 33,000	\$ 33,000
2	Traffic Control (approx 10%)	LS	1	\$ 33,000	\$ 33,000
<b>SUBTOTAL</b>					<b>\$ 66,000</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF	720	\$ 160	\$ 115,200
12	Dewatering - Minor	LF	720	\$ 30	\$ 21,600
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 148,800</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	720	\$ 130	\$ 93,600
<b>SUBTOTAL</b>					<b>\$ 93,600</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	720	\$ 80	\$ 57,600
<b>SUBTOTAL</b>					<b>\$ 57,600</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 12,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	15	\$ 1,200	\$ 18,000
<b>SUBTOTAL</b>					<b>\$ 18,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 396,000</b>
	Construction Contingency		25%	\$	\$ 99,000
	Engineering, Administration, Legal, etc.		20%	\$	\$ 79,200
	City Staff Time		5.0%	\$	\$ 19,800
<b>TOTAL COSTS</b>					<b>\$ 594,000</b>



Project Boundary

7000 South

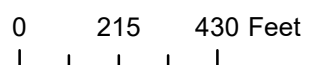
Bangerter Hwy

3200 West



**PROJECT 16:  
7000 South**

Future Pipe Size		Existing Pipe Size	
	12		10
	15		12
	18		15
	21		18
	24		21
	30		27
	36		30
	39		36
			39



J-U-B ENGINEERS, INC.



OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** 7000 South  
**Number:** 16  
**Desc:** 7000 South from Bangerter Highway to 3200 West

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 84,160	\$ 84,160
2	Traffic Control (approx 10%)	LS	1	\$ 84,160	\$ 84,160
<b>SUBTOTAL</b>					<b>\$ 168,320</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF		\$ 32	\$ -
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF	2,380	\$ 85	\$ 202,300
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	2,380	\$ 25	\$ 59,500
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 273,800</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	2,380	\$ 120	\$ 285,600
<b>SUBTOTAL</b>					<b>\$ 285,600</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	2,380	\$ 80	\$ 190,400
<b>SUBTOTAL</b>					<b>\$ 190,400</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	6	\$ 6,000	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA		\$ 75,000	\$ -
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ -</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA	18	\$ 1,100	\$ 19,800
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 55,800</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 1,009,920</b>
			25%	\$	252,480
			20%	\$	201,984
			5.0%	\$	50,496
<b>TOTAL COSTS</b>					<b>\$ 1,515,000</b>



**Project Boundary**

Campus View Dr

Center Park Drive

Jordan Landing Blvd



**PROJECT 17:  
Campus View**

Future Pipe Size		Existing Pipe Size	
	12		6
	15		8
	18		10
	21		12
	24		27
	30		36
	36		39

0 170 340 Feet

**J-U-B**  
J-U-B ENGINEERS, INC.

OTHER J-U-B COMPANIES

## OPINION OF PROBABLE COST

**Name:** Campus View Drive, Cobble Ridge Drive, Jordan Landing Boulevard  
**Number:** 17  
**Desc:** 12-inch on Campus View Drive from Watkins Way to Cobble Ridge Drive; Cobble

Item No.	Description	Unit	Quantity	Unit Price	Total
<b>General</b>					
1	Mobilization (approx. 10%)	LS	1	\$ 91,404	\$ 91,404
2	Traffic Control (approx 10%)	LS	1	\$ 91,404	\$ 91,404
<b>SUBTOTAL</b>					<b>\$ 182,808</b>
<b>Gravity Sewer Pipe</b>					
3	8-inch PVC Pipe & Bedding	LF		\$ 24	\$ -
4	10-inch PVC Pipe & Bedding	LF		\$ 27	\$ -
5	12-inch PVC Pipe & Bedding	LF	3,320	\$ 32	\$ 106,240
6	15-inch PVC Pipe & Bedding	LF		\$ 40	\$ -
7	18-inch PVC Pipe & Bedding	LF		\$ 55	\$ -
8	21-inch PVC Pipe & Bedding	LF		\$ 70	\$ -
9	24-inch PVC Pipe & Bedding	LF		\$ 85	\$ -
10	30-inch PVC Pipe & Bedding	LF		\$ 115	\$ -
11	36-inch PVC Pipe & Bedding	LF		\$ 160	\$ -
12	Dewatering - Minor	LF	3,320	\$ 10	\$ 33,200
13	Connect to Existing	EA	2	\$ 6,000	\$ 12,000
<b>SUBTOTAL</b>					<b>\$ 151,440</b>
<b>Trench Excavation and Backfill</b>					
14	10-20 feet	LF	3,320	\$ 100	\$ 332,000
<b>SUBTOTAL</b>					<b>\$ 332,000</b>
<b>Surface Repair</b>					
15	UDOT Asphalt Patch (20 ft wide)	LF		\$ 130	\$ -
16	City Asphalt Patch (20 ft wide)	LF	3,320	\$ 80	\$ 265,600
<b>SUBTOTAL</b>					<b>\$ 265,600</b>
<b>Manholes</b>					
16	60" Manhole (10-20 ft. depth)	EA	9	\$ 6,000	\$ 54,000
<b>SUBTOTAL</b>					<b>\$ 54,000</b>
<b>Crossings/Borings</b>					
17	Irrigation Canal or Railroad (Boring)	EA	1	\$ 75,000	\$ 75,000
18	Major Arterial Crossing (Boring)	EA		\$ 150,000	\$ -
<b>SUBTOTAL</b>					<b>\$ 75,000</b>
<b>Miscellaneous</b>					
19	Lateral Connections (estimate)	EA		\$ 1,100	\$ -
20	Bypass Pumping	Days	30	\$ 1,200	\$ 36,000
<b>SUBTOTAL</b>					<b>\$ 36,000</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 1,096,848</b>
			Construction Contingency	25%	\$ 274,212
			Engineering, Administration, Legal, etc.	20%	\$ 219,370
			City Staff Time	5.0%	\$ 54,842
<b>TOTAL COSTS</b>					<b>\$ 1,645,000</b>

Pipes with d/D greater than or equal to 0.75 (red pipes on d/D map) that are not included as CIPs

Pipe ID	Location	Pipe Size
ML-100202	Lake Powell Road - between Annandale Way and Strada Crest Way	8
ML-100201	Lake Powell Road - between Annandale Way and Strada Crest Way	8
CDT-4283	South Prosperity Way / 6200 West - near Boeing	8
CDT-7390	7800 South and 5490 West	8
CDT-31	7801 South and 5490 West	12
CDT-6992	Bedrock Flats Lane	8
CDT-6994	Bedrock Flats Lane	8
341	Grizzly Way	12
343	Grizzly Way	12
345	Grizzly Way	12
347	Grizzly Way	12
353	Grizzly Way	10
355	Grizzly Way	10
357	Grizzly Way	10
359	Grizzly Way	10
52	7800 South and 4690 West	21
CDT-2252	New Bingham Highway - south of 4800 West	10
1264	New Bingham Highway and 4800 West	15
CDT-5096	8260 South and 4800 West	8
CDT-4056	Copper Pot Lane	8
1210	7800 South and 4000 West	15
Multiple	Old Bingham Highway - between 7800 South and 8600 South	Various
CDT-3738	9000 South and 3200 West	8
CDT-3745	9000 South and 3200 West	8
CDT-3744	9000 South and 3200 West	8
CDT-3704	South Edenbrook Way and 9000 South	8
CDT-1158	7800 South and Elk Ridge Drive	8
ML-100207	7550 South and 2230 West	8
ML-100208	7550 South and 2230 West	8
ML-100209	7550 South and 2230 West	8
1706	Redwood Road - near Deseret Industries	8
1016	7800 South - near outlet	36
CDT-1148	7800 South - near outlet	36
859	Sugar Factory Road and Redwood Road	8
ML-EGF001	8660 South and Eggli Farms Circle	8
CDT-3435	1300 West - near 9000 South	8
CDT-3368	8870 South and 1095 West	8
CDT-6890	Near power station	24

<b>d/D</b>	<b>Comment</b>
1	Datum issue
1	Datum issue
0.789	Less slope (0.56%) than surrounding pipes
0.779	Appears to be at capacity
0.754	Appears to be at capacity
1	Incorrect invert elevations
1	Incorrect invert elevations
1	Watch (appears to be at capacity)
1	Watch (appears to be at capacity)
1	Watch (appears to be at capacity)
0.845	Watch (appears to be at capacity)
0.762	Watch (appears to be at capacity)
0.794	Watch (appears to be at capacity)
0.916	Watch (appears to be at capacity)
0.752	Watch (appears to be at capacity)
0.856	Watch (appears to be at capacity)
0.793	Appears to be at capacity
0.821	Flat slope; appears to be at capacity
0.829	Appears to be at capacity
0.975	Incorrect invert elevations
0.826	Appears to be at capacity
Various	Incorrect invert elevations
0.765	Incorrect invert elevations
1	Incorrect invert elevations
1	Incorrect invert elevations
0.835	Incorrect invert elevations
0.78	May not be an existing pipe
1	Datum issue
1	Datum issue
1	Datum issue
0.787	Appears to be at capacity
0.751	Flat slope for pipe size
0.899	Flat slope for pipe size
0.81	Appears to be at capacity
1	Incorrect invert elevations
0.871	Incorrect invert elevations
0.769	Flat slope; appears to be at capacity
0.755	Near capacity